

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



559313

(43) International Publication Date
27 January 2005 (27.01.2005)

PCT

(10) International Publication Number
WO 2005/008415 A2

(51) International Patent Classification⁷:

G06F

(21) International Application Number:

PCT/US2004/022200

(22) International Filing Date: 8 July 2004 (08.07.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/485,472

8 July 2003 (08.07.2003)

US

(71) Applicants and

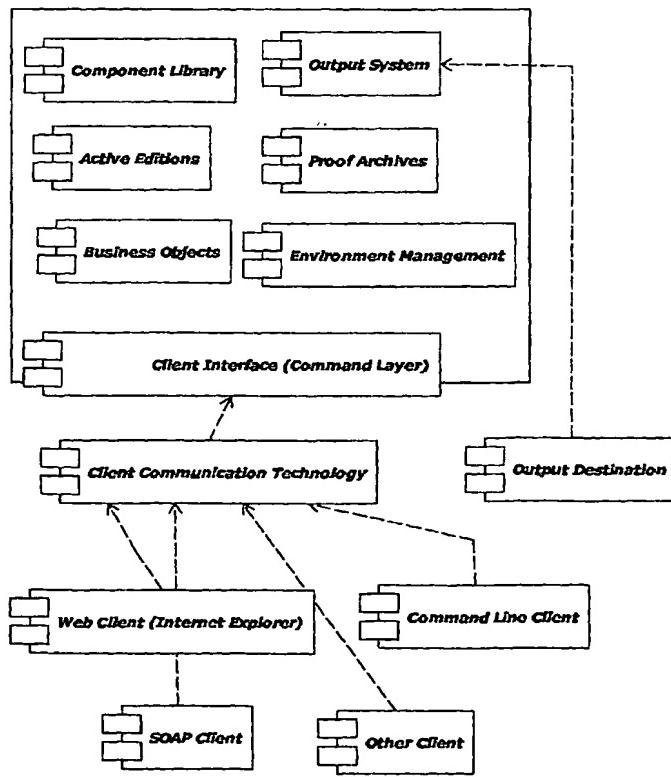
(72) Inventors: KRIEGER, Michael, Alex [US/US]; 776 Stouts Valley Raod, Riegelsville, PA 18077 (US). CARRTINE, Becky [US/US]; 346 Herrick Avenue, Teaneck, NJ 07666 (US). DAVIE, Loren [US/US]; 266 Park Street, Montclair, NJ 07043 (US). NAPOLITAN, David [US/US]; 696 President Street, Brooklyn, NY 11215 (US). SMITH, Amy [US/US]; 18 Beech Tree Lane, Yarmouth, ME 04096 (US). BROWN, Kathie [US/US]; 50 Woodland Drive, Upper Black Eddy, PA 18972 (US). KELLY, Scott, C. [US/US]; 1140 Fifth Avenue, New York, NY 10128 (US).

(74) Agents: LANE, John, R. et al.; Frommer Lawrence & Haug LLP, 745 Fifth Avenue, New York, NY 10151 (US).

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,

[Continued on next page]

(54) Title: AN AUTOMATED PUBLISHING SYSTEM THAT FACILITATES COLLABORATIVE EDITING AND ACCOUNTABILITY THROUGH VIRTUAL DOCUMENT ARCHITECTURE



(57) Abstract: The present invention automates the publishing of financial, legal, and governmental documents and any other publications that are structured and require compliance with corporate or external standards and may share content elements. It gives users control in an always-on, familiar environment: the Internet. Due to its virtual document architecture and ability to operate over the Internet and intranets, the system facilitates collaborative work and traces accountability. The key concept behind automating publishing is to control scheduling and costs by better content management. The present invention handles document content as small, reusable components, down to the paragraph and table cell level. The interface helps users assemble documents from these version-controlled components with automated support. The system applies context and filtering criteria stored with each component to locate and apply content fragments to a current document. The system of the present invention can apply structural rules and content requirements to ensure compliance with regulatory requirements and company business rules. A working virtual document within the system always incorporates the current version of all constituent elements.

WO 2005/008415 A2



KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

- (84) **Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report*

- (84) **Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,

- (88) **Date of publication of the international search report:**

31 March 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
27 January 2005 (27.01.2005)

PCT

(10) International Publication Number
WO 2005/008415 A3

(51) International Patent Classification⁷: G06F 15/00,
17/60

(71) Applicants and

(72) Inventors: KRIEGER, Michael, Alex [US/US]; 776 Stouts Valley Raod, Riegelsville, PA 18077 (US). CARTINE, Becky [US/US]; 346 Herrick Avenue, Teaneck, NJ 07666 (US). DAVIE, Loren [US/US]; 266 Park Street, Montclair, NJ 07043 (US). NAPOLITAN, David [US/US]; 696 President Street, Brooklyn, NY 11215 (US). SMITH, Amy [US/US]; 18 Beech Tree Lane, Yarmouth, ME 04096 (US). BROWN, Kathie [US/US]; 50 Woodland Drive, Upper Black Eddy, PA 18972 (US). KELLY, Scott, C. [US/US]; 1140 Fifth Avenue, New York, NY 10128 (US).

(21) International Application Number:

PCT/US2004/022200

(22) International Filing Date: 8 July 2004 (08.07.2004)

(25) Filing Language: English

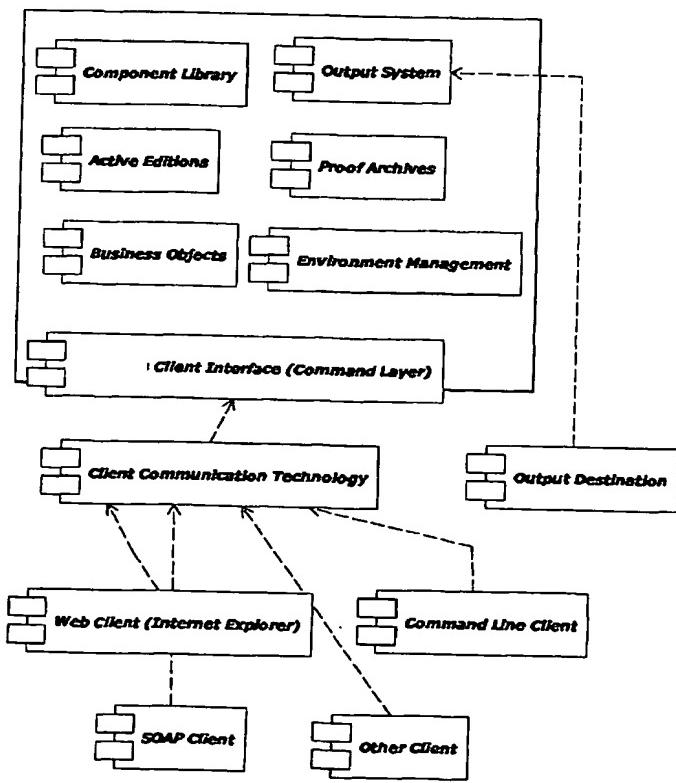
(26) Publication Language: English

(30) Priority Data:
60/485,472 8 July 2003 (08.07.2003) US

(74) Agents: LANE, John, R. et al.; Frommer Lawrence & Haug LLP, 745 Fifth Avenue, New York, NY 10151 (US).

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,*[Continued on next page]*

(54) Title: AN AUTOMATED PUBLISHING SYSTEM THAT FACILITATES COLLABORATIVE EDITING AND ACCOUNTABILITY THROUGH VIRTUAL DOCUMENT ARCHITECTURE



(57) Abstract: The present invention automates the publishing of financial, legal, and governmental documents and any other publications that are structured and require compliance with corporate or external standards and may share content elements. It gives users control in an always-on, familiar environment: the Internet. Due to its virtual document architecture and ability to operate over the Internet and intranets, the system facilitates collaborative work and traces accountability. The key concept behind automating publishing is to control scheduling and costs by better content management. The present invention handles document content as small, reusable components, down to the paragraph and table cell level. The interface helps users assemble documents from these version-controlled components with automated support. The system applies context and filtering criteria stored with each component to locate and apply content fragments to a current document. The system of the present invention can apply structural rules and content requirements to ensure compliance with regulatory requirements and company business rules. A working virtual document within the system always incorporates the current version of all constituent elements.